In the Claims:

A1

1. A method of providing a translucent ceramic body with increased in-line optical transmission comprising:

(a) densifying a ceramic body to form a substantially translucent ceramic body, the densifying process including heating the ceramic body under a pressure of at least 350 kg/sq.cm, wherein the ceramic body includes about 99.9% alumina; and

(b) physically contacting a major surface of the substantially translucent ceramic body with a molten inorganic flux, which includes an alkali metal borate capable of dissolving the ceramic, at elevated temperatures and for a time period sufficient to improve transmittance of the ceramic body.

A2

4. The method of claim 3, wherein the step of densifying includes:
during heating, subjecting the ceramic body to a pressure of at least about 700 kg/sq.cm.

A3

14. An optically transparent densified, sintered polycrystalline ceramic body having a major surface treated with a process comprising:

heating a ceramic body in an inert atmosphere a pressure of at least 350 kg/sq.cm for a sufficient time to form a substantially translucent polycrystalline ceramic body, wherein the ceramic body includes about 99.9% alumina; and

physically contacting a major surface of the substantially translucent ceramic body with a molten inorganic flux which includes an alkali metal borate capable of dissolving the ceramic at elevated temperatures and for a time period sufficient to improve light transmittance by the ceramic body.

A4

17. The optically transparent sintered polycrystalline alumina body of claim 14, wherein the ceramic body further includes up to about 0.5 weight percent magnesia.

A5

20. A high intensity electric discharge lamp comprising:

a discharge vessel which defines a chamber, the discharge vessel being constructed from a polycrystalline material including about 99.9% alumina, which has been densified by applying sufficient pressure and temperature to reduce pores in the vessel and polished by immersing a major surface of the substantially translucent vessel in a molten inorganic flux at elevated temperatures and for a time period sufficient to reduce unevenness in the major surface;

electrodes sealed into ends of the chamber; and

a fill sealed within the chamber, the fill including a ionizable medium for initiating and sustaining a discharge.

Please cancel claims 2 and 16 without prejudice or disclaimer.